

REMARKS

1. The Examiner has rejected claims 1-6 under 35 U.S.C. 103(a) as unpatentable over Dorner US 1,758,655 (the "Dorner Patent") in view of Rinman (US 1,879,503). In particular, Examiner states that all the elements of claim 1, as amended, are disclosed by the Dorner Patent, except for the precipitation of silicate from the filtrate, and that Rinman discloses the acidification of filtrate to precipitate silicate and the removal of the silicate.
2. Dorner teaches that three steps are required for satisfactory pulp formation from non-wood material such as straw. First, a leaching step is necessary to remove water soluble carbohydrates and the like. Second, treatment with caustic soda is required to react with all of the silicates. Dorner states that sufficient alkali is required to react with all the silica. Third, the material is digested and cooked with caustic soda in "the ordinary manner".
3. The difference between Dorner and the present invention, as claimed in claim 1, is that Dorner requires a significant amount of alkali to be used, enough to "react with all of the silica" (see column 3, lines 36-39) which would raise the pH range of the solution above the pH range of 7 to about 11 which is claimed. This is still a large amount of alkali, which Applicant has previously stated is undesirable in the inventive process.
4. Therefore, Applicant has amended claim to specify that sufficient alkali is added to reach a pH range of 7 to about 11, which is restricted to less than that required to react with all the silica. Support for the amendment is found in paragraph 18 of the specification. The present invention relies on mechanical action to liberate a significant portion of the silica, and chemical action to dissolve only a portion of the silica in the straw.
5. Thus, Dorner fails to teach the use of a restricted amount of alkali, as it describes the use of alkali to chemically react with all of the silica in the straw. In the present invention, as claimed in amended claim 1, significantly less alkali is specified, which will not raise the pH above the specified range, and is not required to dissolve all of the silica.
6. Therefore, as amended, Applicant respectfully submits that claims 1-3 and 5-6 comply with 35 U.S.C. 103(a) and are patentable over Dorner in view of Rinman. Dorner and Rinman

fail to teach all of the limitations of amended claim 1.

CONCLUSION

Applicant submits that claims 1-3 and 5-6 are now in condition for allowance, and allowance is respectfully requested.

Respectfully submitted,
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Enclosures:

1. Petition for a three month extension.
2. Credit Card Payment Form